

KAZANTSEVA, T.I.; BELYAYEVA, L.N.

Using products of casein decomposition in silicosis. Sov.med. 21  
Supplement:26 '57. (MIRA 11:2)

1. Iz Sverdlovsogo instituta gigiyeny truda i professional'nykh  
zabolevaniy.  
(LUNGS--DUST DISEASES) (METHIONINE)

USSR/Human and Animal Physiology, Respiration CIA-RDP86-00513R000721320017-8<sup>T-6</sup>

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65316

Author : Kazantseva T.I.

Inst : -

Title : The Effect of Silicic Acid on the Binding by Tissue Proteins  
of Radioactive Metabolites.

Orig Pub : Tr. Vses. konferentsii po med. radiol. Eksperim. med. radiol.  
Moskva, Medgiz, 1957, 217-219

Abstract : No abstract

Card : 1/1

KAZANTSEVA, T.I., starshiy nauchnyy sotrudnik

Comparative binding of radioactive amino acids by proteins of the tissues and blood following the action of silicic acid. Sbor. rab. po silik. no.2:217-224 '60. (MIRA 14:3)

1. Sverdlovskiy nauchno-issledovatel'skiy institut gigiyeny truda i profpatologii.

(AMINO ACIDS) (PROTEINS IN THE BODY)  
(SILICIC ACID--PHYSIOLOGICAL EFFECT)

KAZANTSEVA, T.I., starshiy nauchnyy sotrudnik

Influence of silicic acid on the binding of radioactive metabolites  
by tissue proteins. Sbor. rab. po silik. no.2:225-231 '60.  
(MIRA 14:3)

1. Sverdlovskiy nauchno-issledovatel'skiy institut gigiyeny truda  
i profpatologii.

(SILICIC ACID—PHYSIOLOGICAL EFFECT)  
(RADIOACTIVE SUBSTANCES) (PROTEINS IN THE BODY)

ALTSTEIN, A.D.; KAZANTSEVA, V.A.; SHIRMAN, G.A.

Interference between tick-borne encephalitis and poliomyelitis viruses in tissue culture. I. Resistance of tick-borne encephalitis virus-infected cells to the cytopathic effect of poliovirus. Acta virol. Engl. Ed. Praha 6 no.5:421-427 S '62.

1. Institute of Poliomyelitis and Viral Encephalitides, U.S.S.R.  
Academy of Medical Sciences, Moscow.  
(ENCEPHALITIS, EPIDEMIC virol.) (POLIOMYELITIS VIRUSES immunol.)

KOGAN, B.I.; KAL'ZHANOVA, Ye.G.; SAL'TINA, L.V.; SOLODOV, N.A.;  
DMITRIYEVA, O.P.; Prinimali uchastiye: UKHANOVA, N.I.;  
PERVUKHINA, A.Ye.; KAZANTSEVA, V.G.; ULANOVSKAYA, V.D.;  
VLASOV, K.A., glav. red.; LIZUNOV, N.V., otv. red.;  
PYATENKO, Yu.A., otv. red.; SALTYKOVA, V.S., otv. red.;  
SLEPNEV, Yu.S., otv. red.; FABRIKOVA, Ye.A., otv. red.  
PODOSEK, V.A., red. izd-va; GOLUB', S.I., tekhn. red.

[Rare alkali metals (lithium, rubidium, and sesium); a  
bibliography on their geochemistry, mineralogy, crystal  
chemistry, geology, the analytic methods of their determi-  
nation, and their economics] Redkie shchelochnye metally (litii,  
rubidiu i tsezii); bibliografiia po geokhimii, mineralogii,  
kristallokhimii, geologii, analiticheskim metodam opredelenia  
i ekonomike. Sost. B.I.Kogan i dr. Moskva, Izd-vo Akad. nauk  
SSSR, 1962. 327 p. (MIRA 16:2)

1. Akademiya nauk SSSR. Institut mineralogii, geokhimii i kri-  
stallokhimii redkikh elementov. 2. Chlen-korrespondent Akademii  
nauk SSSR (for Vlasov).

(Bibliography--Alkali metals)

KALECHITS, I.V.; NAKHMANOVICH, A.S.; KAZANTSEVA, V.M.

Influence of the bond multiplicity on the hydrogenation  
kinetics of polycyclic hydrocarbons. Kin. i kat. 4 no.3:  
395-403 My-Je '63. (MIRA 16:7)

I. Institut nefte- i uglekhimicheskogo sinteza Sibirskego  
otdeleniya AN SSSR.

(Hydrocarbons) (Hydrogenation)  
(Chemical bonds)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721320017-8"

Country : USSR

Category: Cultivated Plants. Fruits. Berries.

Abstr Jour: RZhBiol., No 22, 1958, № 100455

Author : Kazantseva, V.P.

Inst :

Title : Form Development of AppleTree in the Conditions  
of Tuvin'skaya Oblast'.

Orig Pub: V. sb.: Obrezka i formirovaniye plodovykh dorav'  
yev. Barnaul, 1957, 113-115

Abstract: No abstract.

Card : 1/1

KAZANTSEVA, V.S.

SLONIMSKIY, G.L.; MUSAYELYAN, I.N.; KAZANTSEVA, V.V.

Mechanical properties of polymer mixtures. Vysokom. soed. 6 no.2:219-  
223 F '64. (MIRA 17:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ACCESSION NR: APL037277

S/0190/64/006/005/0818/0822

AUTHORS: Slonimskiy, G. L.; Musayelyan, I. N.; Kazantseva, V. V.; Ozerov, G. M.

TITLE: Mechanical properties of polymer mixtures. 2. Mixing an amorphous polymer with an amorphous one, and a crystalline polymer with a crystalline one

SOURCE: Vysokomolekulyarnye soyedineniya, v. 6, no. 5, 1964, 818-822

TOPIC TAGS: crystalline polymer mixture, polypropylene polyethylene mixture, amorphous polymer, polypropylene polyisobutylene mixture, thermomechanical curve, relative stress, elongation

ABSTRACT: These investigations involved mixtures of amorphous polypropylene (APP) (mol. wt. 25 700) with amorphous polyisobutylene (APIB) (mol. wt. 100 000), and of crystalline isotactic polypropylene (CPP) (mol. wt. 347 000) with polyethylene (CPE) (mol. wt. 20 000). Mixtures in ratios 1:0, 3:1, 1:1, 1:3, and 0:1 were prepared from solutions of the polymers in decalin at 130-140°C by precipitation with acetone. They were dried in vacuum at 100°C. Films of the amorphous components were pressed at 150°C under 100 kg/cm<sup>2</sup>, and films of the crystalline components were pressed at 240°C under 100 kg/cm<sup>2</sup>. A study of CPP-CPE mixtures, conducted with a

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ACCESSION NR: AP4037277

polarizing microscope MIN-8, revealed their heterogeneous structure. The thermo-mechanical curves within a 0-175°C range showed that the temperature of flow rose with the increase of CPP content. The same was true for the strength of the crystalline polymer mixture. It was also found that a noticeable deformation trend set in following the melting of a large part of CPP. Studies of the relation between the relative stress and the elongation of the amorphous APP-PIB mixtures (at 20, 40, and 60°C) revealed a more rapid decrease of deformation in mixtures with a predominance of APP. Orig. art. has: 4 charts and 1 picture.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Elementoorganic Compounds, AN SSSR)

SUBMITTED: 01Jun63

DATE ACQ: 09Jun63

ENCL: 00

SUB CODE: MT , OC

NO REF SOV: 002

OTHER: 000

Card 2/2

ACCESSION NR: AP4037278

S/0190/64/006/005/0823/0826

AUTHORS: Slonimskiy, G. L.; Musayelyan, I. N.; Kazantseva, V. V.

TITLE: Mechanical properties of polymer mixtures. 3. Mixing polyisobutylene with polyethylene. Densities of the polymeric mixtures

SOURCE: Vyssokomolekulyarnye soyedineniya, v. 6, no. 5, 1964, 823-826

TOPIC TAGS: polymer mixture, polyisobutylene polyethylene mixture, thermomechanical property, polymer mixture density

ABSTRACT: The present investigation involved polyisobutylene (mol. wt. 100 000) and high pressure polyethylene (mol. wt. 20 000), compounded in ratios of 1:3, 1:1, and 3:1. Aliquots of the crystalline and amorphous polymers were dissolved in decaline at 130-140°C in an atmosphere of nitrogen. They were then precipitated with acetone and dried in vacuum at 100°C. Films made from these samples were pressed at 200°C and 100 kg/cm<sup>2</sup>, and subjected to x-ray analysis and thermomechanical tests. The relation between the density of mixtures and their composition was determined. The x-rays and thermomechanical curves showed the incompatibility of crystalline and amorphous polymers. It was found that the densities of the mixes bear a direct

Card 1/2

L 9976-63 EWP(j)/EWT(1)/EWT(m)/BDS/FCS(k)/EEC-2/EED-2--AFFTC/  
APGC/ASD/ESD-3--Pc-l/Pi-l/Pj-l/P1-4--RM/MAY/WR  
ACCESSION NR: AP3000338

S/0142/63/006/002/0199/0200

AUTHOR: Zav'yalov, A. S.; Kazantseva, Ye. A.

83

TITLE: Surface-wave antenna for wide-angle scanning of a beam

82

253

SOURCE: Izv. VUZ: Radiotekhnika, v. 6, no. 2, 1963, 199-200

TOPIC TAGS: surface-wave antenna, Luneberg lens, plexiglass disk, radiation lobes, effective width, axial symmetry

TEXT: The antenna described is a modified two-dimensional analog of a Luneberg lens, constructed to have a variable index of refraction. The antenna is nonmetallic and consists of a disk whose cross section varies so as to maintain the focus effect of a spherical Luneberg lens. The disk for the investigated antenna was made of plexiglass, had a diameter of 44 cm, and was designed for a wavelength of 3.2 cm. Disk thicknesses were 32.6 at the center and 12.7 mm at the edge. The antenna was fed by a waveguide having a dielectric insert whose optimum length for power match was found

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ACCESSION NR: AP3000338

experimentally to be 25 mm. The antenna radiation patterns taken in the E-plane, i.e., the plane of the disk, at 3.0, 3.2, and 3.4 cm are essentially identical and show a main lobe width of 5° at the 3-db level. The radiation lobes in the H plane show greater dependence on the frequency; effective width of the pattern is about 50°. Owing to its axial symmetry the antenna can provide beam scanning over 360°. Orig. art. has: 3 figures and 3 formulas.

ASSOCIATION: Laboratoriya radiofiziki SFTI pri Tomskom gos. universitete im. V. V. Kuybysheva (Laboratory of Radio Physics SFTI at the Tomsk State University)

SUBMITTED: 22May62 DATE ACQ: 13Jun63 ENCL: 00  
SUB CODE: 00 NO REF Sov: 002 OTHER: 001

Card

nh/pcl  
2/2

0.4.

KAZAKHSTAN, YE KH.

Modified determination of hydroxymethylanthraquinones.  
E. Kh. Kazantseva (Pharm. Inst., Pyatigorsk). *Med. Prom. S.S.R.* 1949, No. 6, 23-6.—A simplified procedure  
is: 2 g. powd. ergot is extd. on the water bath 2.5 hrs. with  
200 ml.  $\text{CHCl}_3$  and 50 ml. 25%  $\text{H}_2\text{SO}_4$  and filtered into a  
separatory funnel; the org. layer is evapd. and the residual  
hydroxymethylanthraquinones are weighed after drying at  
70°. (I. M. Kostolapoff)

Kazantseva, Ye. Kh. Docent

Botany, Medical

Pharmacognostic examination of *Tamus communis*. Apt. delo no. 3, 1952

Monthly List of Russian Accessions, Library of Congress. November 1952  
UNCLASSIFIED.

DAVIDOVICH, V.F.; KAZANTZева, Ye.L.; MALYSHEVA, M.N.

Characteristics of the epidemiology of tularemia and ways for  
its eradication. Zhur. mikrobiol., epid. i immun. 33 no.12:  
44-49. D '62. (MIRA 16:5)

1. Iz Saratovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.  
(SARATOV PROVINCE—TULAREMIA)

COUNTRY : USSR.  
 CATEGORY : Zoological Parasitology, Acarids and Insects  
             as Disease Vectors. Insects.  
 AFS. JOUR. : RZhBiol., No. 14, 1958, No. 62675.  
 AUTHORS : Dovnikov, A. V.; Derevyanchenko, K. I.;\*  
 INST. : The Astrakhan' Anti-Plague Station.  
 TITLE : Fleas of the Rodents in the Sand Zone of the  
           Astrakhanskaya Oblast's Left Bank Territory.  
 ORIG. PUB. : Sb. tr. Astrakhansk. protivochymn. st., 1955.  
             vvp. 1, 302-355.  
 ABSTRACT : For 1947-1950, there were collected on the  
           southwestern Volga-Ural sands mainly from  
           the crested (JSE) and midday (MSE) gerbils  
           222,057 fleas. The little beasts, the en-  
           trances into burrows (by means of raking) and  
           the nests (with the help of digging) were  
           examined. 26 flea species were discovered.  
           "Actual" (obtained by a careful registered  
           collection) abundance indices (I) of the

CARD: 1/7

\*Kazantseva, Yu. M.; Chernova, N. I.

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COUNTRY : APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721320017-8"

ANS. JOUR. : No. 6867B

**AUTHOR :**

INST. :  
TITLE :

CRIG, FUR. :

**ABSTRACT** : fleas for CSE were 2.5 times and for JSE 3.3 times greater than the "working" indices (obtained by a mass collection). Seasonal variations of "actual" and "working" I are similar, but their magnitude differences in cold weather of the year are smaller than in warm weather. Observational expositions are illustrated by the "working" I. On the gerbils, *Ceratophyllus laevicaps*, *Xenopsylla conformis* and *Coptosylla lamellifer* predominate. The means (for the years 1945-1950) of *C. laevicaps*

CARD: 2/7

COUNTRY  
CATEGORY

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721320017-8

MAZANTSEVA, Ye.N.

Resistance to gas in some lawn grasses. Nauch. trudy AKKH  
no.24&109-112 '64  
(MIRA 1982)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721320017-8"

KAZANZHI, Konstantin Konstantinovich; IVANOV, S.M., red.

[Static electricity] Staticheskoe elektrичество.  
Moskva, Znanie, 1965. 31 p. (Novoe v zhizni, nauke,  
tekhnike. IV Seriya: Tekhnika, no.11) (MIRA 18:6)

*KAZANZHI, V.G.*

USSR/Cultivated Plants - Grains.

M-2

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91609  
 Author : Lebedev, N.I., Kazanzhi, V.G.  
 Inst : Moldavian Scientific Research Institute for Agriculture.  
 Title : Test Results on the Effectiveness of Black and Occupied  
     Fallows for Winter Wheat Under the Conditions of Northern  
     Zone of Moldavia.  
 Orig Pub : Byul. nauchno-tekhn. inform. Mold. n.-i. in-ta s. kh.  
     Kishinev, 1957, 7-12.  
 Abstract : Tests were conducted in 1953-1956. The mixture used as  
     fallow-occupying crops were: vetch-oat, vetch-winter bar-  
     ley, vetch-rye, corn for green feed, corn for ensilage.  
     The best crops for preceding winter wheat on occupied fal-  
     lows turned out to be vetch-rye and vetch-winter barley  
     mixtures. The conditions for getting good yields of

Card 1/2

*KAZANZHI, V.G.*

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721320017-8"

CATEGORY :

ABS. JOUR. : RZBiol., No. 19, 1958, No. 86980  
 AUTHOR : Kazanzhi, V. G.  
 INST. : Moldavian Scientific-Research Institute \*  
 TITLE : Corn as the Crop Preceding Winter Wheat

ORIG. PUB. : Byul. nauchno-tekhn. inform. Mold. n.-i.  
 in-ta s. kh. Kishinev, 1957, 13-16  
 ABSTRACT : Yield of winter wheat following early corn  
     grain crop equals that following corn harvested as green  
     fodder and for silage. It is recommended to apply complete  
     mineral fertilizer prior to planting winter wheat after  
     corn and to use disking in lieu of plowing over weed-free  
     areas. Good results were obtained on applying P<sub>2</sub>O<sub>5</sub> 80-100  
     kg/hectare over drills during planting. -- A. F. Khlystova.

CARD: //

\* of Agriculture

KAZAR, A.; HERKEL, S.

'Effect of artificial interruption of pregnancy on the cervical tonus.  
Cesk. gynek. 27/41 no.8:567-569 '62.

l. Gyn.-por. klin. Lek. fak. UPJS v Kosiciach, prednosta prof. dr.  
T. Schwarz.

(ABORTION THERAPEUTIC) (CERVIX UTERI)  
(ATROPINE) (EPHEDRINE) (CHLORPROMAZINE)

KAZAR, A.

Contribution to the measurement of the tone of the uterine cervix in the 1st trimester of pregnancy. Cesk. gynek. 28 no.9:613-616 N'63.

1. Gyn. - por. Lek. fak. UPJS v Kosiciach, prednosta prof.  
dr. T.Schwarz,

\*

KAZAR, A.

Medical dilatation of the cervix uteri in the course of induced  
abortion. Cesk. gynek. 29 no.8:597-600 O '64.

. Gyn-por. klin. Lek. fak. University P.J. Safarika v Kosiciach,  
(prednosta doc. dr. K. Poradovsky, CSc.).

KAZAR, D.; MANINGER, Ye. [Maninger, E.]; SABO, L. [Sabo, L.]

Effect of some mechanical factors on healing in medial  
varus fractures of the femoral neck. Ortop., travm. i  
protez. 24 no.3:11-18 Mr '63. (MIRA 17:2)

1. Adres avtorov: Budapesht, Institut travmatologii.

KAZAR, G.

Local anesthesia in surgery of the thorax. Magy. sebesset 5 no. 4:  
254-260 Nov 1952.  
(CIML 24:1)

1. Doctor. 2. Third Surgical Clinic (Director -- Prof. Dr. Pal Rubanyi),  
Budapest Medical University.

FARAGO, Istvan, dr.; KAZAR, Gyorgy, dr.

Connections of the early syndrome of skull injuries to later conditions; observations in 366 cases. Ideg. szemle 8 no.5: 152-156 Oct 55.

1. A Budapesti Orvostudomanyi Egyeten III. sz. Sebészeti Klinikaja Tarumatologial Intesete (igazgato: Rubanyi Pal dr. egyetemi tanar) es Ideg Elme Klinikaja (igazgato: Nyiro Gyula dr. egyetemi tanar) kozlemenye.

(HEAD, wounds & inj.

closed head inj., early & late neurotic & psychotic sympt. (Hun))

(WOUNDS AND INJURIES

head, closed inj., early & late neurotic & psychotic sympt. (Hun))

HUNGARY

EGYED, Bela, Dr., KAZAR, Gyorgy, Dr.; VIII District Szanto Kovacs Janos Street Ambulant Services, Department of Accidental Injury Rehabilitation (Aftercare) (VIII. Keruleti Szanto Kovacs Janos Utcai Rendelointezet, Baleseti Rehabilitacio Osztaly), Budapest.

"The Significance of the Sudeck Syndrome in Traumatology."

Budapest, Magyar Traumatologia, Orthopaedia es Helyreallito Sebeszet, Vol IX, No 2, 1966, pages 81-88.

Abstract: [Authors' English summary modified] On the basis of data obtained from the Rehabilitation Center for Traumatology in Budapest, the importance of the disorder is emphasized. Nearly 1000 patients with Sudeck syndrome are treated in the department annually from the city. Most of the patients are women between 40-70 years old. On the average, the syndrome prolongs the duration of treatments by 3-4 months. About one third of the cases recover totally, another third may be forced to change their occupation, become disabled or are put in retirement because of pronounced disability. Damage to the arms is more frequent than to the legs and the syndrome is seen most frequently in cases of typical radius fracture. When treated in the I. stage of the syndrome, the prognosis is better although only about half of these cases recover fully and the results are poor in one-fifth of the cases. Prevention of the development of Sudeck syndrome and the elimination of errors in the treatment of injuries should be aimed at since this will provide better results than treatment of the already developed syndrome. 7 Eastern

1/1 European, 24 Western references

HUNGARY

APPROVED FOR RELEASE 06/13/2000, CIA-RDP86-00513R000721320017-8"

Kovacs J. Street Ambulant Services, Department of Rehabilitation of Accidental Injuries, and Radiology (VIII. Keruleti Szanto Kovacs J. Utcai Rendelointezet Baleseti Rehabilitacio Osztaly es Rontgenosztaly), Budapest, and Ambulant Services, Department of Surgery (Rendelointezet, Sebeszeti Osztaly), Paszto.

"Malacia of the Navicular Bone of the Hand in an 11 Year Old Boy."

Budapest, Magyar Traumatologia, Orthopaedia es Helyreallito Sebeszet, Vol IX, No 4, 1966, pages 302-306.

Abstract: [Authors' English summary modified] Necrosis of the navicular bone, which developed in an 11 year old boy, is described. Following the first trauma, a cyst developed and fragmentation of the proximal portion occurred one month after the second trauma. Complete healing was achieved by means of fixation for 6 months. A radiological follow-up of the case was carried out from the beginning until the recovery. 1 East German, 8 Western references.

KOVACSICS, Janos, dr.,; KAZAR, Gyorgy, dr.

Position and importance of practical teaching in medical education. Nepegeszsegugy 36 no.3:57-63 Mar 55.

(EDUCATION, MEDICAL  
practical train., importance)

MANNINGER, Jeno, dr.; KAZAR, Gyorgy, dr.; SZABO, Laszlo, dr.

Current treatment of femoral neck fractures. Orv. hetil. 106  
no. 49:2315-2319 15 D ' 65.

1. Orszagos Traumatologiai Intezet (igazgato: Szanto, Gyorgy, dr.)

HUNGARY

MANNINGER, Dr Jeno, SZABO, Dr Laszlo, KAZAR, Dr Gyorgy, and NAGY, Dr Erno,  
of the National Traumatological Institute (Orszagos Traumatologial Intezet)

"The Role of Venography in the Examination of the Circulation of the Head  
of the Femur"

Budapest, Magyar Traumatologia, Orthopaedia es Helyreallito Sebeszet,  
Vol 6, No 3, 1963; pp 205-212.

Abstract [Authors' English summary]:

The authors make a short summary of the literature on the examination of circulation in the head of the femur. They performed venography in 37 cases of fractures of the neck of the femur in order to get some essential proof of prognosis for cure. In the case of negative findings they recommend a more stable osteosynthesis than that used normally (broad plated nails, nail and chip-graft, support) and besides that reducing of the compression acting upon the head of the femur (prolonged use of crutches, after six month Voss'operation).

[44 references, mainly Western].

1/1

KAZAR, Gyorgy, dr. VOLCZ, Jozsef, dr.

Injuries in adolescence treated in an outpatient clinic.  
Nepegeszsugugy 45 no. 5:186-187 My'64

1. Kozlemeny a VIII. ker. Szanto Kovacs J. u.-i Rendelointezet  
(Igazgato: Galcsik, Boldizsar, dr.) kosponti baleseti ambu-  
lanciajarol).

KAZAR, Gyorgy, dr.

Mechanical aspects of osteosynthesis in femoral neck fractures.  
Magy sebesz. 17 no.4:223-226 Ag 64.

1. Az Orszagos Traumatologiai Intezet (Igazgato: Szanto Gyorgy  
dr. egyetemi tanar).

KAZAR, Gyula

ADAM, Tamas

HUNGARY

Animal Husbandry Research Institute, Department of Zoology and Animal Foods (Allattenyesztesi Kutato-intezet Allatelettani es Takarmanyozasi Osztalya), Budapest

Budapest, Allattenyesztes, No 3, Sep 62, pp 271-275.

"The Complex Effect of Air-temperature, Relative Humidity and Increased Airflow on Sucking Pigs."

Co-author:

KAZAR, Gyula, Animal Husbandry Research Institute, Department of Zoology and Animal Foods, Budapest.

## HUNGARY

KAZAR, Gyula, Dr., MEHES, Gyorgy, Dr., GYIMESI, Vilmos, Dr., PROKOPP, Laszlo, Dr; Veterinary Control Service for the Meat Industry (Husipari Allatorvosi Ellenorzo Szolgalat) (chief veterinary: KAZAR, Gyula, Dr.).

"Data on the Incidence of Some Infectious and Parasitic Diseases in Hungarian Slaughter Houses in 1959-61."

Budapest, Magyar Allatorvosok Lapja, Vol 6, No 18, June 63, pp 248-253.

Abstract: [Authors' English summary modified] Compared with the previous three-year period, cases of swine tb decreased, tb of cattle, determined macroscopically, decreased from 11-13 to 9.5-7.5 per cent, that of pigs decreased from 1 to 0.3-0.6 per cent. The incidence of severe, generalized cases of tb in cattle increased two-fold, in swine three-fold. Swine erysipelas decreased to one third of the previous level, swine fever and salmonellosis showed a new increase after a transient decrease. Fasciolosis of cattle and echinococcosis of swine caused steadily high losses, with heavy infestation in about one-third of each stock. Severe cases of fasciolosis of sheep was put to 50 per cent among the slaughtered animals. Cysticercosis of cattle increased slightly while in pigs it was observed very rarely, with only six cases reported in 1961. 6 Eastern European, 6 Western references.

1/1

19

KAZAR, J., ADAM, T.

"The effect of the physical and chemical constituents of the micro-climate in  
farrowing houses on the organism of suckling pigs." p. 309. (ACTA AGRICULTURA  
ACADEMIAE SCIENTIARUM HUNGARICAE, Vol. 2, no. 3/4, 1952. Budapest.)

SO: Monthly List of East European Accessions, Vol. 2, #8, Library of Congress  
August, 1953, Uncl.

KAZAR, J.

KAZAR, J. - What the modified standard should be for horned cattle registration.  
(to be contd.) p. 19  
Vol. 11, No. 14, July 1956.  
Magyar Mezogazdasag. Budapest, Hungary.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4, April 1957.

KAZAR, J.; KECOKES, S.

KAZAR, J.; KECOKES, S. What the modified standard should be for horned cattle registration. p. 25.

Vol. 11, No. 15/16, Aug. 1956

MAGYAR N. ZOOGAZDASAG

AGRICULTURE

Budapest, Hungary

So: East European Accession, Vol. 6, No. 5, May 1957

KAZAR, J.; CHORVATH, B.

Contribution to the study of the antigen structure of the hemolysin  
of Leptospira. Cesk. epidem. 11 no.6:353-357 N '62.

1. Ustav epidemiologie Lekarskej fakulty Univerzity Komenskeho v  
Bratislave.

(LEPTOSPIRA) (HEMOLYSINS)

BREZINA, R.; KAZAR, J.

Phagocytosis of Coxiella burnetii and the phase variation phenomenon. Acta virol. (Praha) [Eng] 7 no.5:476 S '63.

1. Institute of Virology, Czechoslovak Academy of Sciences,  
Bratislava.

(COXIELLA) (PHAGOCYTOSIS) (IMMUNE SERUMS)

BREZINA, R.; KAZAR, J.

Study of the antigenic structure of *Coxiella burnetii*. IV.  
Phagocytosis and opsonization in relation to the phases of  
*C. burnetii*. Acta virol. (Praha) [Eng] 9 no.3:268-274 My'65.

1. Institute of Virology, Czechoslovak Academy of Sciences,  
Bratislava.

LORINCZ, Ferenc, dr.; SPANYAR, Pal, dr.; KIESELBACH, Gyula, dr.; KAZAR,  
Jeno

Development in the Hungarian meat-industry standards. Szabvany  
kozl 14 no.3:59-61 Mr '62.

KAZAR, Jeno, okleveles mezogazdasagi mernok

Significance of standardization in animal husbandry.  
Szabvany kozl 16 no.9:166-168 S '64.

1. Hungarian Bureau of Standards, Budapest.

KAZAR, Lona

Study trip of the Section of Teaching Methodology in the German Democratic Republic. Roldr kozl 9 no.4:379-380 '61.

1. Az Oktatáselméjészertani Szakosztaly elnöke, a csoport vezetője.

KAZAR, Leona

Educational tasks in teaching the geography of the Alföld.  
Foldr kozl 8 no.1:15-22 '60.

KAZAR, Leona; SMAROGLAY, Ferenc, dr.; TOTH, Aurel, dr., kozepiskolai tanar

Report on the work of the Division of the Methodology of  
Teaching. Foldr kozl 10 no.3:301-302 '62.

1. Magyar Foldrajzi Tarsasag Oktatasmodszertani Szakosztalyanak  
elnoke; Kozponti Pedagogus Tovabbkepzo Intezet tanszekvezeto  
tanara; "Foldrajzi Kozlemenyek" szerkeszto bizottsagi tagja  
(for Kazar). 2. Vezeto szakfelugyelo; Magyar Foldrajzi  
Tarsasag Oktatasmodszertani Szakosztalyanak tarselnoke (for  
Smaroglay). 3. Szakfelugyelo; Magyar Foldrajzi Tarsasag  
Oktatasmodszertani Szakosztalyanak titkara (for Toth).

KAZAR, Leona (Vengersakaya Narodnaya Respublika)

Observations on economic geography and practical work in an  
industrial plant. Geog. v shkole 25 no.6:36-41 N-D '62.  
(MIRA 15:12)  
(Geography, Economic—Study and teaching)

SZEKELY, Andras, dr., egyetemi adjunktus; BULLA, Bela, dr., egyetemi tanar;  
MAJOR, Jeno, dr.; KOCH, Ferenc, dr., egyetemi tanar;  
TOTH, Aurel, kozepiskolai tanar; KAZAR, Leona, tanszekvezeto  
tanar; DUDAR, Tibor; RADO, Sandor, egyetemi tanar, a  
foldrajztudomanyok doktora; DEZSENYI, Janos, dr.; KARLOCAI, Janos, dr.;  
LANG, Sandor, dr., egyetemi docens, a foldrajztudomanyok kandidatusa  
(Szeged); KORPAS, Emil, dr., egyetemi docens, a foldrajztudomanyok  
kandidatusa (Szeged); PENZES, Istvan, dr. (Szeged); KOLTA, Janos, dr.;  
SZABO, Pal Zoltan, dr., foldrajzi tudomanyok kandidatusa;  
PINCZES, Zoltan, dr.; KADAR, Laszlo, dr.; PRISNYAK, Sandor;  
PEJA, Gyozo, dr., foldrajztudomanyok kandidatusa

Reports on the work of the Divisions and country sections at  
the 82d general assembly of the Hungarian Geographical Society.  
Foldr kozl '8 no.3:323-336 '60.

1. Magyar Foldrajzi Tarsasag valasztmanyi tagja (for Szekely,  
Toth, Kazar, Karlocai, Lang, Korpas, Kolta, Szabo, Pinczes,  
Peja). 2. Magyar Foldrajzi Tarsasag tarselnoke (for Bulla,  
Koch and Rado). 3. "Foldrajzi Kozlemenyek" szerkeszto  
bizottsagi tagja (for Koch and Rado). 4. Magyar Tudomanyos  
Akademia levelezo tagja (for Bulla). 5. Magyar Foldrajzi  
Tarsasag Termeszeti Foldrajzi Szakosztaly elnöke (for Bulla).

(Continued on next card)

SZEKELY, Andras—(continued) Card 2.

6. Magyar Foldrajzi Tarsasag Termeszeti Foldrajzi Szakosztaly titkara (for Szekely).
7. Magyar Foldrajzi Tarsasag Gazdasagi Foldrajzi Szakosztaly elnöke (for Koch).
8. Magyar Foldrajzi Tarsasag Gazdasagi Foldrajzi Szakosztaly titkara (for Major).
9. Magyar Foldrajzi Tarsasag Oktatasmodszertani Szakosztaly elnöke, es Kozponti Pedagogus Tovabbkepzo Intezet (for Major).
10. Magyer Foldrajzi Tarsasag Oktatasmodszertani Szakosztaly titkara, es szakfelugyelo (for Toth).
11. Magyar Foldrajzi Tarsasag Terkepeszeti Szakosztaly elnöke (for Rado).
12. Magyar Foldrajzi Tarsasag Terkepeszeti Szakosztaly elnöke (for Rado).
13. Magyar Foldrajzi Tarsasag Termeszetjaro Csoport (for Dezsenyi and Karlocai).
14. Vallalati jogtanacsos (for Karlocai).
15. Magyar Foldrajzi Tarsasag Szegedi Osztalya elnöke (for Lang and Korpas).
16. Magyar Foldrajzi Tarsasag Szegedi Osztalya titkara (for Penzes).
17. Magyar Foldrajzi Tarsasag Del-Dunantuli Osztalya elnöke, es tudomanyos intezeti igazgato, Pecs (for Szabo).
18. Magyar Foldrajzi Tarsasag Del-Dunantuli Osztalya titkara, es tudomanyos munkatars, Pecs (for Kolta).

(Continued on next card)

SZEKELY, Andras--(continued) Card 3.

19. Magyar Foldrajzi Tarsasag Tiszantuli Osztalya elnöke (for Kadar).
20. Magyar Foldrajzi Tarsasag Tiszantuli Osztalya titkara (for Pinczes).
21. Magyar Foldrajzi Tarsasag Miskolci Osztalya Elnöke, es Kossuth-Rudas gimnaziumi igazgató (for Peja).
22. Magyar Foldrajzi Tarsasag Miskolci Osztalya titkara (for Frisnyak).

KAZAR, Leona, tanszékvezető tanár

On the work of the Commission on the Teaching of Geography,  
International Geographical Union. Földr kozl 10 no.4:386-387 '62.

1. "Foldrajzi Közlemenek" szerkesztő bizottsági tagja; CPI;  
Nemzetközi Foldrajzi Unió Foldrajzoktatási Bizottságának levelező  
tagja.

KAZAR, Leona, tanszekvezeto tanar

Draft of the UNESCO handbook on the methodology of teaching  
geography. Foldr kozl 11 no.2:167-174 '63.

1. OPI; "Foldrajzi Kozlemenek" szerkeszto bizottsagi tagja;  
Magyar Foldrajzi Tarsasag valasztmanyi tagja.

CRISTESCU, E.; TITE, G.; OLARU, I.; SZILAGYI, D.; BRAGA, V.; HOARA, M.;  
KAZAREL, S.

Our experience with the pneumatic extractor applied in 150 cases.  
Rumanian M Rev. no.2:76-80 Ap-Je '60.  
(DELIVERY)

KOLOMIYCHENKO, M.I., prof. (Kiyev, Reyterskaya ul., 17, kv.6); KAZARENKO,  
A.N., kand. med. nauk

Early and late results of surgery for thyrotoxic goiter. Vest. khir.  
82 no.6:24-30 Je '59.  
(MIRA 12:8)

1. Iz kliniki obshchey khirurgii (zav. - prof. M. I. Kolomiychenko)  
Kiyevskogo meditsinskogo instituta i khirurgicheskoy kliniki Kiyev-  
skogo instituta usovershenstvovaniya vrachey.  
(GOITER)

POROSHIN, K.T.; KAZARENKO, T.D.; SHIBNEV, V.A.; DEBABOV, V.G.

Study of the action of collagenase on synthetic substrates.  
Biokhimiia 26 no.2:244-248 Mr-Ap '61. (MIRA 14:5)

1. Institute of Organic Chemistry, Academy of Sciences of the  
U.S.S.R., Moscow.  
(COLLAGENASE) (PEPTIDES)

KAZAREVA, Ye.N.; KUTSKAYA, I.P.; VAKULENKO, N.A.; PREOBRAZHENSAYA, Ye.V.;  
GLAGOVSKAYA, R.S.

Water-soluble erythromycin salt. Antibiotiki 7 no.6:506-510 Je '62.  
(MIRA 15:5)

1. Vsescyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(ERYTHROMYCIN)

SIROTKIN, Z.L.; KAZAREZ, A.N.

Raise the level of the operation of strip mine trucks. Gor.zhur.  
no.12:40-44 D '64. (MIRA 18:1)

1. Glavnyy konstruktor Belorusskogo avtozavoda (for Sirotkin).
2. Nachal'nik byuro ot dela glavnogo konstruktora Belorusskogo  
avtozavoda (for Sirotkin, Kazarez).

KAZAREVICH, N.P.

Investigating the dynamics of shrinkage in the manufacture of  
molded fuel. Trudy IGI 8:275-281 '59. (MIRA 13:1)  
(Briquets (Fuel))

DENISOV, Aleksandr Gavrilovich; KAZAREZ, Aleksey Nikolayevich;  
SIROTKIN, Zalya L'vovich; TERNOVSKIY, Genrikh Ivanovich;  
SHUMSKIY, Mechislav Frantsevich; LESNYAKOV, F.I., red.;  
GALAKTIONOVA, Ye.N., tekhn. red.

[MAZ-525 dump truck; its design and operation] Avtomobil'-  
samosval MAZ-525; ustroistvo i ekspluatatsiya. Moskva,  
Avtotransizdat, 1963. 166 p. (MIRA 16:10)  
(Dump trucks)

KRESKOV, A.P. [Kreshkov, A.P.]; BIKOVA, L.N. [Bykova, L.N.]; KAZARIAN, N.A. [Kazaryan, N.A.]; ALDAROVA, N.S. [Aldarova, N.Sh.]

Advances in the field of the analysis of inorganic and organic compounds in nonaqueous solutions. Analele chimie 17 no.4:43-88 O-D '62.

KLEYN, G.K., prof., doktor tekhn.nauk; VAVIZEL', I.K., inzh.; KAZARIN,  
A.A., inzh.

New graphs for determining loads exerted by vehicles on underground  
pipes. Stroi. truboprov. 6 no. 2:10-12 F '61. (MIRA 14:5)  
(Pipes)

KENE, Fransua [Quesney, Francois] [1694-1774]; KAZARIN, A.I., red.-sostavitel';  
GORBUНОV, A.V. [translator]; KAPLAN, F.R. [translator]; FSYGINA,  
L.A. [translator]; SPERANSKAYA, L., red.; MOGINA, N., tekun.red.

[Selected works on economics] Izbrannye ekonomiceskie proizvedeniia.  
Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1960. 549 p.

(Agriculture--Economic aspects)

(MIRA 14:3)

KAZARIN, A.K., inzh.; KOMKOV, B.Ye., inzh.

Ship movement on trucks with a centralized lifting system.  
Sudostroenie 29 no.10:62 O '63. (MIRA 16:12)

KAZARIN, A.N.

Mobile hoist for changing friction apparatus. Elek. i tepl. tiaga  
3 no.12:23 D '59. (MIRA 13:4)

1. Nachal'nik proizvodstvenno-tekhnicheskogo otdela depo Abdulino  
Kuybyshevskoy dorogi.  
(Railroads--Repair shops)

KAZARIN, A.N.

Mechanization of operations in the repair of bearing axle units of  
an electric locomotive. Elek. i tepl. tiaga 4 no. 4:20-21 '60.

(MIRA 13:6)

1. Nachal'nik proizvodstvenno-tehnicheskogo otdela depo Adbulino.  
(Electric locomotives--Maintenance and repair)

KAZARIN, A.N.

Effective equipment for the repair of electric locomotives.  
Elek. i tepl. tiaga 4 no.10:24-25 0 '60. (MIRA 13:10)

1. Nachal'nik proizvodstvenno-tekhnicheskogo otdela depo Abdulino Kuybyshevskoy dorogi.  
(Electric locomotives--Maintenance and repair)

KAZARIN, A.N.

Simple device for an easy removal of electric brushes. Elek. i teplo-  
tiaga 6 no.1:19 Ja '62. (MIRA 10:1)

1. Nachal'nik proizvodstvenno-tehnicheskogo otdela depo Abaulino  
Kuybyshevskoy dorogi.

(Brushes, Electric)  
(Electric locomotives--Maintenance and repair)

KAZARIN, A. S., Cand of Tech Sci -- (diss) "Investigation of the geometry and the process of cutting during the work of a highly productive , high speed cutting drills." Kiev, 1957, 14 pp (Kiev Polytechnical Institute)  
100 copies (KL, 32-57, 93)

KAZARIN A.

PHASE I BOOK EXPLOITATION

SOV/5040

Reznikov, Naum Iosifovich, Igor' Grigor'yevich Zharkov, Vladimir  
Mikhaylovich Zaytsev, Arkadiy Semenovich Kazarin, Boris Alekseyevich  
Kravchenko, and Fedor Prokof'yevich Uryvskiy

Proizvoditel'naya obrabotka nerzhaveyushchikh i zharoprochnykh mater-  
ialov (Efficient Processing of Corrosion-and Heat-Resistant Mater-  
ials) Moscow, Mashgiz, 1960. 198 p. Errata slip inserted. 7,000  
copies printed.

Ed. (Title page): Naum Iosifovich Reznikov, Honored Scientist and  
Technologist RSFSR, Doctor of Technical Sciences. Professor; Ed.  
of Publishing House: A. F. Balandin; Tech. . V. D. El'kind;  
Managing Ed. for Literature on Metalworking and Machine-Tool Making:  
V. I. Mitin, Engineer.

PURPOSE: This book is intended for technical personnel and highly  
skilled workers in the metalworking industry.

COVERAGE: The authors discuss the general characteristics and classi-  
fications of modern corrosion-, scale-, and heat-resistant materials with

Card 1/9

**Efficient Processing (Cont.)**

SOV/5040

regard to their machinability with cutting tools, and in particular with hard-alloy-tipped tools. Also examined are the processes of turning, cutting-off with single-point tools and saws, and the basic types of milling and drilling. Special attention is given to the use of liquid and gaseous coolants. No personalities are mentioned. There are 36 references: 33 Soviet and 3 English.

**TABLE OF CONTENTS:****Introduction**

- |  |   |
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| 1. The role of corrosion-, scale-, and heat-resistant materials in modern machine building | 3 |
|--|---|

**Ch. I. The Classification and Basic Properties of Corrosion-, Scale-, and Heat-Resistant Materials**

- |   |   |
|---|---|
| 2. General characteristics of corrosion-, scale-, and heat-resistant materials          | 5 |
| 3. The classification of corrosion-, scale-, and heat-resistant materials. Basic groups | 5 |

Card 2/9

REZNIKOV, Naum Iosifovich, prof., doktor tekhn.nauk, zasluzhennyy deyatel' nauki i tekhniki; ZHARKOV, Igor' Grigor'yevich; ZAYTSEV, Vladimir Mikhaylovich; KAZARIN, Arkadiy Semenovich; KRAVCHENKO, Boris Alekseyevich; URYVSKIY, Fedor Prokof'yevich; BALANDIN, A.P., red. izd-va; KL'KIND, V.D., tekhn.red.

[Efficient ways of machining stainless and heat-resistant materials]  
Proizvoditel'naya obrabotka nershavieishchikh i zhаропрочных ma-  
terialov. Pod red. N.I.Reznikova. Moskva, Gos.nauchno-tekhn.izd-vo  
mashinostroit.lit-ry, 1960. 198 p. (MIRA 13:12)

(Steel, Stainless) (Heat-resistant alloys)  
(Metal cutting)

3/123/61/000/003/004/023  
A004/A104

AUTHORS: Kazarin, A. S., and Komissarov, V. I.

TITLE: The machinability of the TsAM-4-1 (TsAM-4-1) zinc alloy during longitudinal face end turning and boring

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 3, 1961, 23, abstract 3B207. ("Tr. Kuybyshevsk. aviats. in-t", v. 9, 1959, 105-117).

TEXT: Investigations showed that the TsAM-4-1 alloy distinguishes itself by its good machinability during turning and boring with BK8 (VK8) sintered carbide cutters. The recommended speed range during external turning is 500-700 m/min. A reduction of the cutting speed is caused by the tool wear owing to the presence of slag and oxide impurities in the alloy. There are 10 figures and 1 table.

E. Dyumova

[Abstractor's note: Complete translation]

Card 1/1

Card 1/1 mc

UDC: 669.245.018.45:620.78

DNEPROVSKIY, Stepan Petrovich; KAZARIN, F.V.; VARDIYEVA, K.I.

[A collection of problems for a course in financing and crediting  
of consumers' cooperatives] Sbornik zadach po kursu finansirovaniia  
i kreditovaniia potrebitel'skoi kooperatsii. Pod red. S.P.Dneprov-  
skogo. Moskva, Tsentrociuz, 1955. 91 p. (MERA 10:11)  
(Cooperative societies--Finance)

PEGANOV, F., avtomekhanik (Moskva); KAZARIN, I., inzh.;  
SLETKOV, Yu., inzh. (Bratsk); UGOL'NIKOV, A.; YAKOV, M.,  
izobretatel' (Leningrad); ASTRAKHANTSEV, V., ratsionalizator;  
SHIPITSYN, V., master

Suggested, created, introduced. Izobr.i rats.no.10:20-21  
0 '62. (MIRA 15:9)

1. Bol'shaya ivanovskaya manufaktura, g. Ivanovo (for Kazarin).
2. Chlen soveta Vsesoyuznogo obshchestva izobretateley i  
ratsionalizatorov Moskovskogo pochtaanta (for Ugol'nikov).
3. Vyksunskiy metallurgicheskiy zavod, Gor'kovskaya oblast'  
(for Astrakhantsev). A. Avtoremontnyy zavod, mekhanicheskiy  
uchastok, Krasnoyarsk (for Shipitsyn).  
(Technological innovations)

KAZARIN, N.M., elektromekhanik

Effective use of an auxiliary amplifier. Avtom., telem.  
i sviaz' 9 no.10:27 0 '65. (MIRA 18:11)

1. Tobol'skaya distantsiya Yuzhno-Ural'skoy dorogi.

KAZARIN, N. S.

178T39

USSR/Electricity - Transmission

Feb 51

"Use of a Two-Conductor-Ground (DPZ) System in Mountain Conditions," L. M. Vil'chur, Cand Tech Sci, Engr N. S. Kazarin, Lab Elec Eng, Acad Sci Armenian SSR

"Elektrichesvo" No 2, pp 76-79

Cites results of studying three 2-conductor-ground rural elec power systems operating under mountain conditions where soil has lower resistivity than normal. Compares expense of DPZ system with 3-wire systems. Gives possible limits for use of DPZ system as detd by resistivity of various soils. Submitted 10 Jul 50.

178T39

END

KAZARIN, S.

Great force. Sov.profsciuz 6 no.16:41-44 N '58.

(MIRA 12:2)

1. Predsedatel' ob"yedinennogo postroykoma tresta "Tagilstroy."  
(Construction industry--Management)

KAZARIN, S.

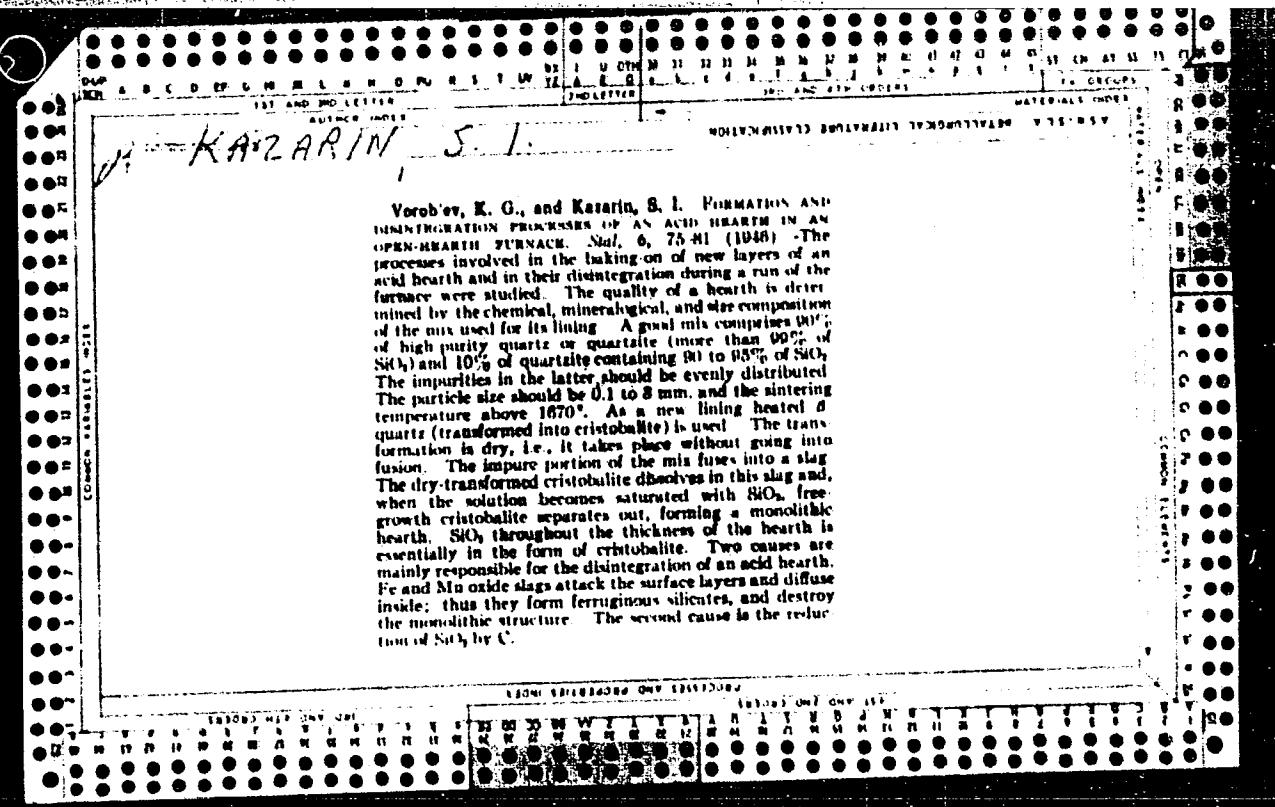
PA

Accessories and precipitates used

7

The acid Martin furnace process in practice. S. I.  
Kazarin. Metallurg 13, No. 9, 41-9 (1938); Chem. Zentr.  
1939, I, 2065. - General information is given on the prepn.  
of an acid Siemens-Martin furnace melt, including mixing  
of the ore and fusion. M. G. Moore

ASH SLA METALLURGICAL LITERATURE CLASSIFICATION



**Steel melting in basic open-hearth furnaces using an alumina-magnesia slag.** S. I. Kazarin. *Nal* 7, 27-32 (1947). The purpose of this investigation was to find and eliminate the causes of flakes and small reduction of area in high-grade steels made in basic open-hearth furnaces instead of by the acid process by which such steels are ordinarily made. The preference of the basic over the acid process was motivated by the relative scarcity of furnace charging materials free of P and S, and by the higher capacity of the basic process. The charge worked out for this process consisted of conversion pig around 40%, scrap iron, Cr-contg. scrap, and up to 10% of shavings. In addition the charge contained limestone 7-10, bauxite 1.0-1.5, and Fe ore up to 2%. Tapping the slag once or twice reduced the P content to 0.02% or lower. After the last dephosphorizing slag is tapped, a new slag is formed, amounting to 3% of the melt and consisting of limestone 40, magnesia-limestone 40, and crushed grog 20%. When the slagging materials fused, the period of "free" boil of the metal began. At the beginning of this period, the compn. of the slag was CaO 30-42, MgO 8-12, MnO 4-8, FeO 10-16, Fe<sub>2</sub>O<sub>3</sub> 1.5-3.0, Al<sub>2</sub>O<sub>3</sub> 6-9, and SiO<sub>2</sub> 16-20%. During dephosphorization and subsequent slag formation the Mn content dropped to 0.15-0.2%. Addn. of Fe-Mn at the beginning of boil raised it to 0.3%. At the end of the boil the Mn was stabilized at 0.05-0.10%. The free boil was continued for 1 hr at a C-combustion rate of 0.2-0.3% per hr. At least 0.35% of C should burn off during this period. Toward the end of the boiling period the viscosity of the slag decreased with a Heurtly funnel.

having a 9-mm. diam. should be 60-80 mm., and have a compn. CaO 31.40, MgO 17.22, MnO 7.10, FeO 7.40, Fe<sub>2</sub>O<sub>3</sub> 1.0-1.5, Al<sub>2</sub>O<sub>3</sub> 5.8, and SiO<sub>2</sub> 15.20%. As the C reached the desired content, the metal was deoxidized with 0.3-0.4% of Mn and 0.15% of Si using Mn-Si and 45% Fe-Si. After 5 min. Fe-Cr was added and after 15-20 min. the furnace was tapped. Into the trough and the bulk (5-7%) Fe-Si was added, so that the metal would contain 0.30-0.35% of Si. The metal was tamped and, after stripping, the ingots were cooled in unheated pits from 300 to 50-100° in 30 hrs. The ingots were then trammed, pre-heated in soaking pits to 700-800°, then in forge furnaces to 1180-1200°, and finally forged. Although this method proved favorable for the production of high-grade steel yet the steel was flaky and the necking cross section too large. It was found that the tendency to form flakes and the small reduction in area are governed by the same factors. Shortening the melting period, duration of dephosphorization, and the C-combustion period raised the resistance to flake formation and increased the reduction in area. The raising of viscosity of the slag during the hold and particularly before deoxidation had a similar effect. All of these measures prevent or reduce gas and partially the absorption by the molten metal and thereby prevent flakiness and increase the reduction in area.

St. Mark

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**CIA-RDP86-00513R000721320017-8"**

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CIA-RDP86-00513R000721320017-8

Kazarin V.I.

Tests on a New Machine for Decoding Telegrams  
in New York Please

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721320017-8"

ANDREYEVA, V. V. and KASANYIN, V. Y.

"Elektrochemische und Korrosionserscheinungen von Titan un Titanlegierungen,"  
paper submitted for the congress on Corrosion, Budapest, 24-30 Sept 1958.

Inst. of Physical Chem., Acad. Sci. USSR.

KAZARIN, V. I.

Third prize(imeni D. K. Chernov) awarded to Engineer V. V. Andreyeva and Engineer V. I. Kazarin (Institute of Physical Chemistry, Ac. Sc., USSR), Engineer G. P. Danilova and Engineer Ye. A. Kamenskaya (Institute of Rare Metals) for their paper "Investigation of the Strength of Titanium Base, Corrosion Resistant Alloys".

Results of the 1958 Competition for Obtaining imeni D. K. Chernov and imeni N. A. Minkevich Prizes, Metallovédeniye i termicheskaya obrabotka metallov, 1959, No. 6, pp 62-64

5(4)

AUTHORS: Andreyeva, V. V., Kazarin, V. I. SOV 2o-121-5-30/50

TITLE: The Electrochemical Properties and the Corrosion Behavior  
of Titanium in Solutions of Sulfuric Acid (Elektro-  
khimicheskiye svoystva i korrozionnoye povedeniye titana  
v rastvorakh sernoy kisloty)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 5,  
pp 873 - 876 (USSR)

ABSTRACT: The velocity of dissolution of titanium in solutions  
of sulphuric acid depends in a very complicated manner  
on the concentration of this solution. There are 2  
maxima of the velocity of solution of titanium; one  
of them corresponds to a 40% concentration, the other -  
to a 75% concentration. The low velocity of the  
dissolution of titanium in diluted solutions of sulfuric  
acid (first minimum) implies a protecting influence of the  
natural oxide film developed on the titanium surface  
by the action of the air. In the region 50-75% of  $H_2SO_4$   
concentration, the velocity of the corrosion of

Card 1/3

The Electrochemical Properties and the Corrosion  
Behavior of Titanium in Solutions of Sulfuric Acid

SOV/20-121-5-30/50

titanium does not vary if the temperature increases from 30° to 50°, the losses of titanium are slightly higher. The investigation of the system  $TiO_2 \cdot SO_3 \cdot H_2O$  proves the possibility of the formation of 2 compounds of  $TiO_2$  with  $H_2SO_4$ , the solubility of which at 100° is extraordinarily low for concentrations of 50-70%. These compounds have the following composition,  $TiOSO_4 \cdot H_2O$  and  $Ti_2O(SO_4)_3 \cdot 5H_2O$  with the ratios  $TiO_2 : SO_3 : H_2O = 1:1:1$  for the first compound and 2:3:5 for the second compound. This was also confirmed by an experiment in which the variation of the potential in a 60% solution of  $H_2SO_4$  was measured as a time function. In those sulfuric acid solutions which correspond to the maxima and minima of the solution velocity of titanium, the electrode potentials have different values. This implies a different character of the reactions on the surface electrode. The activation energy of the ionization of the metal

Card 2/3

The Electrochemical Properties and the Corrosion  
Behavior of Titanium in Solutions of Sulfuric Acid

SOV/2c-121-5-3c, 50

has the value 16,7 kcal/mol. The polarization curves of the anode and of the cathode have horizontal parts which correspond to an intensive solution of the metal. The generation of oxygen on the titanium surface begins at a sufficiently high overvoltage, i.e.  $\sim + 2V$ . Numerous further experimental data are given in this paper. There are 4 figures and 4 references, 3 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, AS USSR)

PRESENTED: April 10, 1958, by A.N.Frumkin, Academician

SUBMITTED: April 10, 1958

Card 3/3

5(4)

AUTHORS: Andreyeva, V. V., Kazarin, V. I. SOV/20-123-6-25/50

TITLE: The Influence of the Ions of Quadrivalent Titanium Upon the Electrochemical Properties and the Corrosion Behavior of Titanium (Vliyaniye ionov chetyrekhvalentnogo titana na elektrokhimicheskiye svoystva i korrozionnoye povedeniye titana)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 6, pp 1048-1051 (USSR)

ABSTRACT: The present paper deals with the problem as to whether an increase of the superficial film in thickness increases the corrosion stability of titanium or not. The thickness of the film formed on the titanium surface during polishing cannot be measured optically since the initial values of the optical constants of a surface of pure titanium are not known. In the present case, only the increase in thickness of the already present film could be investigated. Within 180 days, the thickness of the film increased only by 17 - 22 Å. This increase is not mainly due to an increase of the film in thickness, but, apparently, to the diminishing of the defects in the lattice of titanium oxide. It is possible that there is an equilibrium state in which practically no corrosion of

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The Influence of the Ions of Quadrivalent Titanium SOV/2C-123-6-25/50  
Upon the Electrochemical Properties and the Corrosion Behavior of Titanium

hydrochloric acid, a still higher concentration of  $Ti^{4+}$  would be necessary because of the higher solubility of  $TiO_2$ .

Measurement of electrode potential time dependence while the titanium sample is submerged in a 40% sulphuric acid solution shows progressive titanium activation. In such a solution at room temperature, the dissolution of titanium begins approximately after 2 hours. According to the polarization

curves of titanium in a 40% solution of sulphuric acid in the presence of 0.14 mol/l  $Ti^{4+}$  at 40° and 60°, hydrogen is generated after activation. Titanium is initially dissolved as a bivalent ion. If the solution contains an oxidizer (for example, dissolved oxygen) the reaction  $Ti^{2+} - e \rightarrow Ti^{3+} - e \rightarrow Ti^{4+}$  occurs. The

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The Influence of the Ions of Quadrivalent Titanium SOV/20-123-6-25/50  
Upon the Electrochemical Properties and the Corrosion Behavior of Titanium

oxidation of titanium to  $Ti^{4+}$  is by far slower than that to  
 $Ti^{3+}$ . There are 4 figures and 8 references, 3 of which are  
Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR  
(Institute of Physical Chemistry of the Academy of Sciences,  
USSR)

PRESENTED: July 25, 1958, by A. N. Frumkin, Academician

SUBMITTED: July 21, 1958

Card 4/4

13(7); 25(1)	PLATE I. BOOK EXPLANATION	807/3135
Korporatsiya i nauchnaya stolitsa [Borovsk Research Institute of Steel], Moscow, 1959. 255 p. 7,000 copies printed.		
Ed.: N.D. Tomashov, Doctor of Chemical Sciences, Professor; A.A. Tikhonovskiy, Doctor of Chemical Sciences, Professor; A.I. Kostyrev, Doctor of Chemical Sciences, Professor; and E.S. Popov, Doctor [Editor].		
Ed.: N.D. Tomashov, Doctor [Editor]; Ya.S. Al'pert, Tech. Ed.; S.M. Popov, Managing Ed., For literature on Machine and Instrument Construction; N.V. Povrovskiy, Engineer.		
<b>PURPOSE:</b> This book is intended for scientific and technical personnel concerned with questions of the corrosion and protection of metals.		
<b>CONTENTS:</b> The articles in this collection deal with the corrosion of steels in corrosive environments, investigation of the effect of various factors on corrosion, and methods of protecting steels from sea and electrochemical corrosion. Special attention is given to new methods of investigation. A number of the articles give the results of studies made under operating conditions. New data, obtained by the Department of Metal Corrosion, Moscow Institute of Steel (Moscow Institute of Steel), are published here for the first time. Four articles are the results of work conducted jointly at the laboratories of the Magnitogorsk metallurgical plant (Sergei I. Antonov, N.D. Tomashov, Sergei I. Bolot'), and the Dneprochelyazh metalurgical plant (Chemical Plant General M.I. Kalitina). Most of the articles contain practical recommendations on the protection of metals from corrosion. No personalities are mentioned. References follow each article.		
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5(4),18(7)

AUTHORS:

Andreyeva, V. V., Kazarin, V. I.

SOV/20-128-4-31/65

TITLE:

The Influence of Alloy Elements on the Corrosion Resistance  
and Electrochemical Behavior of Titanium

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 4,  
pp 748-751 (USSR)

ABSTRACT:

The corrosion resistance (CR) of titanium alloys was described by the authors in earlier papers (Refs 1-9). The influence of the following elements on the CR of titanium in acids had been investigated: Cu, Zr, Nb, Mo, Ta, V, Al, Cr, Fe, Ni, Mn, Si, and B. These elements can be divided into 3 groups: (1) Elements raising the CR of Ti (Mo, Ta, Al, Zr, V); (2) elements causing no change in the CR (Si), and (3) elements reducing the CR (Fe, Mn). Figure 1 shows that the elements of the 1st group act already in additions between 1 and 2.5%. A further increase in the addition raises the CR achieved only slightly except for Zr which, in an addition of 50%, makes the CR in  $H_2SO_4$  and HCl equal to that of pure Zr. Figure 2 shows the curves of anodic and cathodic polarization of Ti and its alloys with 10% Nb, Ta, Mo. For Ti + 10% Ta, the anodic

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The Influence of Alloy Elements on the Corrosion  
Resistance and Electrochemical Behavior of Titanium

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current density exhibits the lowest value. Figure 4 shows the corrosion of alloys with 10% Mo, Nb, Ta. There is a linear dependence between the logarithm of the corrosion rate and  $\frac{1}{T}$ . On the basis of the semiconductor theory for corrosion-protective films (Wagner, Refs 10-12, Hauffe, Refs 13-15), the distribution of oxygen ions and electrons in the defective spots of the lattice is discussed, and the following conclusion is drawn: The addition of a metal with higher valency than that of titanium reduces the defective spots available for O-ions by the appearance of an additional number of free electrons, thus raising the CR of Ti. The opposite phenomenon occurs when a metal of lower valency than that of Ti is added. There are 4 figures and 20 references, 10 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

PRESENTED: April 28, 1959, by A. N. Frumkin, Academician

SUBMITTED: April 15, 1959

Card 2/2

*KAZARIN V.I.*

## PHASE I BOOK EXPLOITATION SOV/5956

Andreyeva, V. V., and V. I. Kazarin

Novyye konstruktsionnyye khimicheski stoykiye metallicheskiye materialy (New, Chemically Stable Structural Metal Materials)  
Moscow, Goskhimizdat, 1961. 189 p. (Korroziya v khimicheskikh proizvodstvakh i sposoby zashchity, vyp. 17) 6000 copies printed.

Ed. (Title page): I. Ya. Klinov; Editorial Board of Series: N. A. Baklanov, I. Ya. Klinov, A. L. Labutin, G. V. Sagalayev (Chairman), P. D. Trebukov (Secretary), and P. G. Udyma; Ed.: S. M. Belen'kaya; Tech. Ed.: V. V. Kogan.

PURPOSE: This book is intended for technical personnel of chemical plants.

COVERAGE: The book reviews the properties and methods of producing the new, chemically stable structural materials (titanium-base alloys and zirconium-base alloys) currently being used. Materials which may see wide use in the future due to their valuable properties

Card 1/

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721320017-8"

New, Chemically Stable Structural (Cont.) SOV/5956

(molybdenum-, tantalum-, niobium-, and vanadium-base alloys) are also considered. The corrosion resistance of the alloys in various media, their electrochemical properties, and their fields of application are discussed in detail. No personalities are mentioned. Each chapter is accompanied by references, mostly non-Soviet.

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S/762/61/000/000/007/029

**AUTHORS:** Andreyeva, V. V., Kazarin, V. I.**TITLE:** Corrosion resistance of titanium and its alloys.**SOURCE:** Titan v promyshlennosti; sbornik statey. Ed. by S.G. Glazunov. Moscow, 1961, 90-97.

**TEXT:** The paper comprises a state-of-the-art survey based on published literature. Ti and its alloys may serve usefully in chemical-equipment construction. In some aggressive media the stability of Ti compares with that of Pt. Ti excels over stainless steel by greater resistance against pitting, corrosion cracking, and fatigue corrosion (in chloride solutions etc.). In large structures it may be applied as a 1-2-mm thick cladding material. The corrosion resistance of Ti is attributed to the formation of a protective surface film, the composition of which depends on the conditions of its formation and exposure (cf. the authors, in Akad. nauk SSSR, Dokl., no. 4, 1957, 56-159; v. 121, no. 5, 1958, 873-876; v. 123, no. 6, 1958, 1048-1051). The film consists prevalently of  $TiO_2$ ; at times, in HCl, it may consist of  $TiH_2$ ; within a certain concentration range in  $H_2SO_4$ , it may be formed of variously constituted insoluble compounds of  $TiO_2$ ,  $H_2SO_4$ , and  $H_2O$ . In solutions containing F ions,  $H_2SO_4$ , and HCl (except for highly diluted low-temperature solutions), oxalic acid, etc., Ti is unstable. Passivity may then be attained by anodization (Tomashov, N.D., et al., Protection of Ti in  $H_2SO_4$  and HCl by anodization. Fil. VINITI, 1959, tema (paper) no. 13, no. M-59-239/26) and by adsorption,

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Corrosion resistance of titanium and its alloys.

S/762/61/000/000/007/029

followed by partial chemisorption, of cations such as  $Cu^{2+}$  et al. (cf. Stern, M., J. Electrochem. Soc., v. 105, no. 11, 1958, 638-647; Roger, W., Leidheiser, H., Z.f. Elektrochemie, v. 62, no. 6/7, 1958, 619-830). The authors have shown that the protective effect is due to the presence of a certain quantity of  $Ti^{4+}$  ions in the  $H_2SO_4$  and HCl which established an equilibrium with the  $TiO_2$  of the surface film. The authors have shown, by the potentiostatic method and otherwise, that the presence of oxidizers, such as  $HNO_3$ ,  $H_2O_2$ ,  $O_2$  (aeration),  $KMnO_4$ , et al., produces an oxidizing-reducing potential at which the Ti is passive (potentiostatic curves are depicted and interpreted in detail). Lastly, corrosion resistance through the formation of surface films may be achieved by suitable alloying (composition and characteristics are tabulated and graphed). Most effective additions: Mo, Zr, Nb. The significant favorable effect of a small (1.4%) addition of Al to a Ti+3%Mo alloys is noted. Basically, the alloying addition must be a metal which per se is more corrosion-resistant in the given aggressive medium than Ti alone. It must be capable of forming a protective surface film by solid-solution formation between the oxides of Ti and of the alloying addition. A most effective corrosion-protective improvement on Ti alloys is achieved by heat treatments which produce single-phase alloys with a wholly recrystallized structure. There are 5 figures, 6 tables, and 6 references (4 Russian-language Soviet, 1 German, 1 English-language).

ASSOCIATION: None given.

Card 2/2

18.6306

31049

S/598/61/000/006/030/034  
D217/D303

AUTHORS: Andreyeva, V.V., and Kazarin, V.I.

TITLE: Corrosion resistance and electrochemical properties of titanium and its alloys

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titaniye splavy, no. 6, 1961. Metallotermiya i elektrokhimiya titana, 230 - 236

TEXT: 98.7 % pure Ti and binary Ti alloys with additions of Mo and Zr were studied in solutions of various acids. Apart from the corrosion method, the electrochemical potentiostatic method of plotting polarization curves was used. The latter method enabled the corrosion behavior of metal to be studied at a desired potential, maintained at a constant value by means of an electronic potentiostat. The following relationships were studied: for Ti: C.D. against potential and corrosion against potential in 40 % H<sub>2</sub>SO<sub>4</sub>, 40 % H<sub>2</sub>SO<sub>4</sub> + 5 % HNO<sub>3</sub>, and 40 % H<sub>2</sub>SO<sub>4</sub> + 5 % HNO<sub>3</sub> + 0.1 % NaF. The influence of Zr and Mo content on the rate of corrosion of Ti in

Card 1/2

L 28106-66 EWT(m)/EWP(u)/T/EWP(t)/ETI IJP(c) JD/JG/NB/GD  
ACC NR: AT6013787 (N)

SOURCE CODE: UR/0000/65/000/000/0043/0058

AUTHOR: Andreyeva, V. V.; Kazarin, V. I.; Alekseyeva, Ye. L.; Glazunov, S. G.;  
Solonina, O. P.; Nikulova, V. F.

ORG: none

TITLE: Study of the corrosion resistance and electrochemical and mechanical properties of alloys of the titanium-niobium system

SOURCE: Korroziya metallov i splavov (Corrosion of metals and alloys), no. 2  
Moscow, Izd-vo Metallurgiya, 1965, 43-58

TOPIC TAGS: corrosion resistance, electrochemistry, titanium containing alloy, niobium containing alloy, acid, metal heat treatment

ABSTRACT: This is a continuation of a previous investigation (this issue, pp 29-42) with the difference that it deals with alloys of the Ti-Nb system containing up to 50% wt. Nb. Both metals in unalloyed state have a high corrosion resistance, but in certain solutions, e.g. sulfuric<sup>1</sup> and hydrochloric<sup>1</sup> acid solutions, Ti dissolves at a sufficiently fast rate whereas Nb remains corrosion-resistant. Hence, the addition of Nb to Ti should increase the corrosion resistance of Ti. Mechanical tests of these alloys show that as the Nb content increases (up to 8%) the ultimate strength of the alloy increases from 57 kg/mm<sup>2</sup> to 92 kg/mm<sup>2</sup>; as the Nb content is further

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1. 20100-00  
ACC NR: AT6013787

increased above 8%, however, ultimate strength decreases; a similar pattern of variation with Nb content is displayed by plasticity and hardness. In 10, 40, 60, 75 and 94% solutions of  $H_2SO_4$  the alloys at 40°C, whether in hot-forged state or after heat treatment (heating at 920-650°C for 1 hr, water quenching, aging at 450°C for 10 hr with cooling in air), display a general increase in corrosion resistance with increase in Nb content. A similar pattern, on the whole, is observed when the alloys are placed in  $HPO_3$ ,  $HCl$ ,  $HNO_3$ , and oxalic acid. For the alloys containing upward of 30% Nb, however, aging leads to decomposition of the  $\beta$ -phase, which deteriorates their corrosion resistance. Plotting of the curves of variation in current density as a function of the specified potentials (starting with -0.8 v and ending with +2.2 v) showed that the maximum corrosion rate corresponds to a potential of -0.25 v. As the Nb content of the alloys increases, the critical density of the passivation current decreases and the normal hydrogen potential shifts in the direction of more positive values. The addition of Nb to Ti enhances the corrosion resistance of Ti in solutions of non-oxidizing acids and does not affect the high corrosion resistance of Ti in oxidizing solutions such as 57%  $HNO_3$  or a mixture of  $HNO_3$  and  $HCl$  in the ratio of 1:1 or 2:1 at 100°C. Orig. art. has: 9 figures, 5 tables.

SUB CODE: 07, 11 SUBM DATE: 19Jul65/ ORIG REF: 003/

Card 2/2 JC

L 28402-66 EWT(m)/EPF(n)-2/EWF(t)/ETI IJP(c) JD/JG/A/B/GD

ACC NR: AT6013793 (A) SOURCE CODE: UR/0000/65/000/000/0136/0147

AUTHOR: Andreyeva, V. V.; Kazarin, V. I.; Kudryashova, T. I.

ORG: none

TITLE: Corrosion and electrochemical behavior of titanium and its alloys in wet-process phosphoric acid

SOURCE: Korroziya metallov i splavov (Corrosion of metals and alloys), no. 2  
Moscow, Izd-vo Metallurgiya, 1965, 136-147

TOPIC TAGS: corrosion, electrochemistry, titanium, phosphoric acid

ABSTRACT: The evaluation of the corrosion resistance and electrochemical properties of Ti in wet-process phosphoric acid is of major interest in view of the planned expansion of the production of phosphoric fertilizers in the USSR. Wet-process phosphoric acid is produced by decomposing apatites with H<sub>2</sub>SO<sub>4</sub>. The experiments with technical Ti as well as with Ti alloys containing 1, 5, 10, 15, 20, 30 and 40% Mo and 10, 20, 30, 40 and 50% Nb were performed in wet-process phosphoric acid (32.1% P<sub>2</sub>O<sub>5</sub>, 0.2% CaO, 1.67% SO<sub>3</sub>, 0.4% Fe<sub>2</sub>O<sub>3</sub>, 0.4% Al<sub>2</sub>O<sub>3</sub>, 0.02% MgO, 0.6% SiO<sub>2</sub>, 2.28% F, 0.02% Na, 0.02% K, 59.46% H<sub>2</sub>O; other elements 5.58%). The principal

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1. 20402-66

ACC NR: AT6013793

components of this acid are:  $H_3PO_4$  (up to 50%),  $H_2SiF_6$  (1-3%) and  $Fe_2(SO_4)_3$ ; it is they that markedly affected the corrosion and electrochemical behavior of the metals. The electrochemical studies were performed with the aid of an electronic potentiostat, while the potentials were measured by means of the compensation method with respect to a calomel reference electrode and converted in terms of a normal hydrogen electrode. Findings: the corrosion rate of Ti in phosphoric-acid solutions is a function of the potential. In the presence of specific values of the potential Ti is capable of passing over to passive state. On the basis of the dependence of the density of passivation current on the concentration and temperature, it is possible to establish the regions of concentrations and temperature of phosphoric acid at which Ti displays satisfactory corrosion resistance. Ti in wet-process phosphoric acid is corrosion-resistant (corrosion rate up to 0.1 mm/year) at up to 40°C. The presence of  $Fe^{3+}$  preserves the passive state of Ti at up to 60°C, but at 60°C the corrosion rate then rises to 0.3 g/(m<sup>2</sup>-hr) (0.6 mm/year). Adding Mo to Ti increases the latter's corrosion rate, the more the higher the Mo content of the alloy is, following the relation:  $K = 0.354 \exp [0.184\% \text{ (by wt.)}]$ , owing to repassivation with respect to Mo as a result of the presence of  $Fe^{3+}$  ions in the wet-process phosphoric acid. Adding Nb, on the other hand, improves the corrosion resistance of Ti in the acid, and then the corrosion rate decreases following the relation:  $K = 0.354 \exp [-0.027\% \text{ (by wt.)}]$ . Orig. art. has: 10 figures

SUB CODE: 1, 07, 11. SUBM DATE: 19Jul65/ ORIG REF: 005/ OTH REF: 003

Card 2/2 CC

L 47367-66 EWT(m)/EWP( )/I/EWP( )/ETI E(c) ID/JG/WB  
ACC NRT AR60284 SOURCE CODE: UR/0137/66/000/005/I085/I085

AUTHOR: Andreyeva, V. V.; Kazarin, V. I.; Alekseyeva, Ye. L.; Glazunov, B.  
S. G.; Nikulova, V. F.; Solonina, O. P.

TITLE: Investigation of the corrosion resistance and electrochemical and  
mechanical properties of alloys of the system niobium and titanium

SOURCE: Ref. zh. Metallurgiya, Abs. 51590

REF SOURCE: Sb. Korroziya met. i splavov. No. 2, M., Metallurgiya, 1965,  
43-58

TOPIC TAGS: niobium titanium alloy, corrosion resistance/Ti20Nb alloy

ABSTRACT: Titanium alloys with 2--50% niobium have been investigated. Alloying of titanium with niobium considerably increases  $\sigma_{\text{a}}$  and  $H_B$  of Ti. Thus, after hot forging the Ti-20Nb alloy has  $\sigma_{\text{a}}$  of  $\sim 104$  Mn/m<sup>2</sup> (Ti  $\sim 60$  mn/m<sup>2</sup>),  $H_B \sim 11\%$  (Ti  $\sim 18\%$ ). The corrosion resistance of alloys in solutions of unoxidative acids is considerably higher than that of titanium. In such acids as HNO<sub>3</sub>, the resistance of titanium and titanium-niobium is identical. The critical density of passivating current decreases with an increase of niobium content in

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UDC: 669.295.5

Card 2/2 afs

KAZARIN, V. S. (Phys)

KAZARIN, V. S. (Phys) -- "Accelerated and Auxiliary Methods of Diagnosing Diphtheria." Sub 22 Sep 52, Second Moscow State Medical Inst imeni I. V. Stalin. (Dissertation for the Degree of Candidate in Medical Sciences.)

SO: Vechernaya Moskva January-December 1952